

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A solar cell for placing on a solar generator panel, the cell being characterized in that it is coupled to at least one reflector for reflecting solar radiation onto the cell, the reflector which is designed also to be placed on said panel being of substantially the same width as the contact width of the cell and being fixed at one of its ends in the height direction to the cell by fixing means so that together the cell and the reflector form an individual component, whereas the other end of the reflector remains free, the mechanical flexibility properties of the reflector being determined in such a manner as to enable it to keep upright in a first position with its free end pointing towards outer space in the absence of vertical pressure being applied thereto, thereby defining an “upper” face of the reflector facing out to space and a “lower” opposite face facing the panel, and in such a manner, in a second position, as to be capable of presenting its upper face facing towards the plane of the panel in response to the application of vertical pressure.

2. (currently amended): The cell according to claim 1, characterized in that the cell rests on ~~the a~~ central portion of the reflector, the ends thereof being shaped in such a manner as to form two lateral under-reflectors for the cell.

3. (previously presented): The cell according to claim 2, characterized in that the reflector is made of an electrically insulating material, and of mechanical reinforcement to make said flexibility possible.

4. (currently amended): The cell according to claim 2, wherein both under-reflectors are fixed by electrically insulating fasteners to the cell, the cell resting on an electrically insulating support shaped in such a manner as to support ~~the~~a base of each under-reflector when the under-reflectors are deployed.

5. (previously presented): The cell according to claim 4, characterized in that the under-reflectors are made of a reflecting film.

6. (previously presented): The cell according to claim 2, characterized in that said reflector includes a base on which the cell rests, said base and the two under-reflectors forming a single piece of electrically insulating material, the top ends of the under-reflectors being provided with a reflecting film.

7. (previously presented): The cell according to claim 1, wherein each cell is an individual cell in a string of cells, and an electrically insulating support is located between the individual cell and the panel, wherein the electrically insulating support is shaped to have a profile with two oppositely-directed ends so that a lower first end of the support can support a higher second end of an electrically insulating support associated with a first cell adjacent to the individual cell and belonging to said string of cells, and the higher second end of the electrically

insulating support of the individual cell can rest on a lower first end of an electrically insulating support associated with a second cell adjacent to said individual cell and belonging to said string of cells, whereby the each cell in the string of cells is electrically insulated from the panel supporting the string of cells.

8. (currently amended): The cell according to claim 1, characterized in that said ~~flexible~~-reflector presents mechanical properties such that at equilibrium in the first position, said upper face is concave.

9. (previously presented): The cell according to claim 1, wherein the at least one reflector presents mechanical properties such that at equilibrium in the first position, each reflector forms a plane with the exception of its free end which is outwardly curved so as to enable it to come into contact with a free end of a reflector of a cell in an adjacent cell string during the stage of releasing vertical pressure.

10. (currently amended): The cell according to claim 1, wherein the reflector is a first reflector, and wherein the first reflector contacts a second reflector of an adjacent cell, the second reflector further comprising a second adjacent reflector, having a lower face which abuts the lower face of the first reflector in a symmetrical position when in equilibrium, and wherein the coefficient of friction between contacting portions of the lower face of the first reflector and the lower face of the second reflector is such that when the reflectors are asymmetrically positioned with respect to each other, the coefficient of friction does not prevent repositioning of the reflectors to the symmetrical position.

11. (previously presented): The cell according to claim 2, characterized in that the two upper faces in the two under-reflectors associated with the same cell are folded over onto themselves so as to face each other in the second position.

12. (currently amended): ~~A~~The solar generator panel, characterized in that it includes a solar cell according to claim 1.

13. (previously presented): A spacecraft, characterized in that it includes a solar generator panel according to claim 12.

14. (previously presented): The cell according to claim 1, wherein the upper face of the reflector is folded over onto itself in the second position.

15. (previously presented): The spacecraft according to claim 13, wherein the spacecraft is a satellite.

16. (previously presented): The cell according to claim 4, wherein the cell is attached to the electrically insulating support by means of an insulating adhesive.

17. (previously presented): The cell according to claim 3, wherein the insulating material is KaptonTM and the mechanical reinforcement is made of titanium.

18. (previously presented): The cell according to claim 4, wherein the under-reflectors are covered at least in part by a reflecting film.

19. (currently amended): A solar generator panel, comprising:

a first solar cell component comprising:

a solar cell;

a first reflector to reflect solar radiation onto the cell, wherein the first reflector comprises an upper face, a lower face, a first end and a second end; and

wherein the first end is attached to and extended by a support base, the support base being disposed on the solar generator panel, the second end is free and the solar cell is fixed to the support base, whereby the support base is disposed between the solar cell and the solar generator panel; and

wherein in a first position, in the absence of a vertical force applied to the first reflector in a direction generally towards the solar generator panel, the upper face faces away from the solar generator panel and the lower face faces towards the solar generator panel, and in a second position, in the presence of the vertical force applied to the first reflector in the direction generally towards the solar generator panel, at least a portion of the upper face faces the solar generator panel.

20. (previously presented): The solar generator panel according to claim 19, wherein the first reflector is flexible so as to flex from the first position to the second position in response to the vertical force.

21. (previously presented): The solar generator panel according to claim 19, wherein the first end extends underneath the solar cell.

22. (previously presented): The solar generator panel according to claim 19, wherein the upper face comprises a reflective surface that reflects solar radiation.

23. (previously presented): The solar generator panel according to claim 19, wherein the reflector is substantially the same width as the width of the solar cell.

24. (previously presented): The solar generator panel according to claim 19, wherein the first solar cell component further comprises:

a second reflector integral to and extending from the support base of the first reflector, wherein the second reflector faces the first reflector and is symmetrically aligned with the first reflector.

25. (previously presented): The solar generator panel according to claim 19, wherein the support base is made of insulating material.

26. (previously presented): The solar generator panel according to claim 19, further comprising a plurality of solar cell components arranged in parallel rows on the solar generator panel.

27. (previously presented): The solar generator panel according to claim 26, wherein the support base of the first solar cell component comprises a lower first end and a higher second end, wherein adjacent support bases of the plurality of solar cell components partially overlay.

28. (previously presented): The solar generator panel according to claim 26, wherein the first solar cell component is removable as a unit from the solar generator panel, without removal of an adjacent solar cell component.

29. (currently amended): A solar generator panel, comprising:

a first solar cell component, comprising:

a support base disposed on the solar generator panel;

a solar cell disposed on the support base;

a first reflector to reflect solar radiation onto the cell, disposed on the support base, wherein the first reflector comprises an upper face, a lower face, a first end and a second end; and

wherein the first end is attached to the solar cell, the second end is free and whereby the support base is disposed between the solar cell and the solar generator panel; and

wherein in a first position, in the absence of a vertical force applied to the first reflector in a direction generally towards the solar generator panel, the upper face faces away from the solar generator panel and the lower face faces towards the solar generator panel, and in a second position, in the presence of the vertical force applied to the first

reflector in the direction generally towards the solar generator panel, at least a portion of the upper face faces the solar generator panel.

30. (previously presented): The solar generator panel according to claim 29, further comprising a plurality of solar cell components arranged in parallel rows on the solar generator panel.

31. (previously presented): The solar generator panel according to claim 30, wherein the first solar cell component is removable as a unit from the solar generator panel, without removal of an adjacent solar cell component.

32. (previously presented): The solar generator panel according to claim 30, wherein the solar cell and the attached reflector are removable as a unit from the solar generator panel, without removal of an adjacent solar cell component.